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APPLICATION

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FOR UNITED STATES LETTERS PATENT

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SPECIFICATION

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TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN THAT I, BERNARD P. MAHER, a citizen of
25 IRELAND, have invented a new and useful STROLLER ASSEMBLY of
which the following is a specification:

STROLLER ASSEMBLY

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BACKGROUND OF THE INVENTION

Field of the Invention

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The present invention relates to stroller devices and more particularly pertains to a new stroller device for transporting a child or infant up a flight of stairs.

15 Description of the Prior Art

The use of stroller devices is known in the prior art. While these devices fulfill their respective, particular objectives and requirements, the need remains for an effective stroller for traveling up a flight of stairs.

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Current devices require the users of them to lift the stroller, along with a child or infant therein, up the flight of stairs.

SUMMARY OF THE INVENTION

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The present invention meets the needs presented above by incorporating a spoked axle assembly having a plurality of wheels being attached to and spaced away from a hub. When a lead wheel reaches a stair, the hub rotates so that an upper most of the wheels moves onto the stair. This process continues until the assembly is moved up the entire

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flight of stairs.

To this end, the present invention generally includes a seat and a frame attached to the seat. A rear axle and a front axle is each mounted on the frame. A plurality of back wheels is rotatably attached to the rear axle. Each of a pair of hubs is rotatably coupled to one of a pair of free
5 ends of the front axle. A plurality of arms is attached to and radially extends outwardly from each of the hubs. The arms on each of the hubs are positioned equidistant from each other. Each of a plurality of rods is attached to one of the arms such that each of the rods is orientated substantially perpendicular to a longitudinal axis of an associated one of
10 the arms and parallel to a longitudinal axis of the front axle. At least one of a plurality of front wheels is rotatably coupled to each one of the rods.

There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that
15 follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

20 The objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

25 The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

30 Figure 1 is a schematic side view of a stroller assembly according to the present invention.

Figure 2 is a schematic front view of the present invention.

Figure 3 is a schematic cross-sectional view taken along line 3-3 of
5 Figure 1 of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference now to the drawings, and in particular to Figures 1
10 through 3 thereof, a new stroller device embodying the principles and
concepts of the present invention and generally designated by the reference
numeral 10 will be described.

As best illustrated in Figures 1 through 3, the stroller assembly 10
15 generally includes a seat 12. The seat 12 is preferably cushioned and may
or may not include a plurality of straps as safety restraints for holding a
child in the seat 12. A frame 14 is attached to the seat 12. The frame 14
includes a pair of handles 16 attached to and extending behind and
upwardly from the seat 12. A rear axle 18 and a front axle 20 are each
20 mounted on the frame 14. Each of the rear 18 and front 20 axles are
positioned generally below the seat 12. A plurality of back wheels 22 is
rotatably attached to the rear axle 18.

Each of a pair of hubs 24 is rotatably coupled to one of a pair of free
25 ends of the front axle 20. A plurality of arms 26 is attached to and
radially extends outwardly from each of the hubs 24. The arms 26 on each
of the hubs 24 are substantially equidistant from each other. The plurality
of arms 26 preferably includes at least three arms 26 attached to each of
the hubs 24, though four, five and six arms may also be used. Each of a
30 plurality of rods 28 is attached to one of the arms 26 such that each of the
rods 28 is orientated substantially perpendicular to a longitudinal axis of
an associated one of the arms 26 and parallel to a longitudinal axis of the

front axle 20. The rods 28 are preferably located adjacent to an outer end 30 of the arms 26 and preferable extend through the arms 26. A plurality of front wheels 32 is provided and rotatably attached to the rods 28. At least one front wheel 32 is rotatably coupled to each of the rods 28.

- 5 Fasteners 34 may be threadably coupled to the front axle 20 for securing the hub 24 on the axle. This allow for the hubs 24 to be removed and a single front wheel assembly attached to opposite ends of the front axle 20.

In use, the assembly 10 is used as a conventional stroller. When the
10 person pushing the assembly encounters a stair 8, the leading front wheel stops against the stair 8 so that the hub 24 rotates and the uppermost wheel moves onto the stair 8. This process continues with the next stair until the assembly 10 has been moved up the flight of stairs. This allows the assembly 10, and a child it may be carrying, to be moved up the stars
15 without the person having to lift the stroller up the stairs.

With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of
20 operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

25 Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may
30 be resorted to, falling within the scope of the invention.